I. Introduction

On July 12, 1983 Western States Minerals Corporation (pursuant to 43 CFR 3802) submitted a Plan of Operations to conduct mineral extraction activities in the Drum Mountains. This area lies in West Central Utah, approximately 30 miles northwest of the town of Delta.

II. Description of the Proposed Action and Alternatives

A. Proposed Action

The proposed activities would be conducted in Section 7, T. 15 S., R. 10 W. All operations would be carried out by Western States Minerals, 4975 Van Gordon Street, Wheat Ridge, Colorado 80033.

Western States Minerals proposes to conduct a gold mining operation consisting of open pit mines and leaching ponds. The operation will require about 85 acres of land. The operation which will disturb the surface are: open pit areas, waste dumps, roads, leach ponds, solution ponds, diversion ditch, maintenance shop, strip plant, and office.

The action would be on an area partially disturbed by previous mining operations.

B. Alternatives

1. Deny the application (no action). This alternative would create no environmental impacts, however, it would be inconsistent with House Range MFP, 43 CFR 3802.0-2, and Section 102(a)(12) of the Federal Land Policy and Management Act (FLMPA).

In addition, the mining of gold in the area would be lost.

III. Description of the Existing Environment

A. Non-Living

1. Atmospheric Resources

The climate in the subject area is semi-arid, with temperature extremes ranging from approximately -32°F to 106°F, and annual precipitation averaging around eight inches. Air quality is generally excellent, and noise levels are low.

2. Topography

The Drum Mountains lies on the very eastern edge of the Basin and Range Physiographic Province. The mine is in limestone on the edge of a quartz latite intrusion. Elevations in the area range from 5925 to 6075 feet above sea level.

3. Soils

Very little top soil is found in the subject area. That which is found is rocky and of poor quality in the pit area while that in the

the final material on the slopes. This larger material will hold and stabilize the outer slopes and minimize erosion potential.

5.3 Heap Leaching

5.3.1 General Description and Design Considerations

General Description - The leach site is positioned northwest of the ore body within the claim boundaries. The leach pads will have a general configuration of tilted plane(see Figure 5-3). The pad slope parallel to the collection ditches will be 2 percent, while the slope perpendicular to the collection ditches will be at 4 percent.

The heaps will be encircled by a berm to keep leach solutions within the pad perimeter and also keep the solutions from being diluted by natural runoff. Between this perimeter berm and the outside edge of the heap are two collection ditches that divert solutions to collection ponds.

For the safety and security, the leach site will be completely fenced to minimize access. The fence will be made up of a 36 inch mesh with two barbed wires 12 inches and 24 inches above the top of the mesh fence respectively.

Design Considerations - This section describes the general design and layout of the leach pads and associated facilities. These facilities do not include the metal recovery plant. The leach facilities design was based on the following criteria.

a) The pad size will be approximately 455 ft x 650 ft. The heaps will be constructed to a relatively uniform depth. Using the anticipated density of 16.5 ft^3/ton, the 471,279 tons of ore will be placed in three heaps approximately 12 ft deep.